

CLAIMS:

1. An electrophoretic display unit (100) comprising:
 - an electrophoretic display panel (60) comprising pixels (11);
 - a first counter electrode (16) coupled to pixels (11) in a first portion (66) of the electrophoretic display panel (60);
- 5 - a second counter electrode (17) coupled to pixels (11) in a second portion (67) of the electrophoretic display panel (60), and
 - a controller (20) for controlling a supply of a first signal (V₁₆) to the first counter electrode (16) and a supply of a second signal (V₁₇) different from said first voltage signal (V₁₆), to the second counter electrode (17).
- 10 2. An electrophoretic display unit (100) as defined in claim 1, wherein the first and second signals (V₁₆, V₁₇) are alternating voltage signals having substantially opposite phases.
- 15 3. An electrophoretic display unit (100) as defined in claim 1, further comprising data driving circuitry (30) for supplying a data pulse (D₁-D₁₂) to a pixel electrode (5) of a pixel (11) via a switching element,
 - the controller (20) being adapted to control the data driving circuitry (30) for supplying a setting signal (S₁-S₄) to the pixel electrode (5) for reducing a voltage across the pixel (11) before a transition of at least one of the first and second voltage signals (V₁₆, V₁₇).
- 20 4. An electrophoretic display unit (100) as defined in claim 1, the panel (60) comprising a data electrode (31, 32, 33) coupled to the data driving circuitry (30) and coupled via switching elements to pixels (11) in only one of the first and second portions (66, 67).
- 25 5. An electrophoretic display unit (100) as defined in claim 1, the controller (20) being adapted for controlling data driving circuitry (30) to provide:
 - shaking data pulses (Sh₀, Sh₁, Sh₂);

- one or more reset data pulses (R); and
- one or more driving data pulses (Dr);
to the pixels (11).

5 6. An electrophoretic display unit (100) as defined in claim 5, the controller (20) being adapted for controlling the data driving circuitry (30) to provide first shaking data pulses ($V_{16} - V_{E1}$, $V_{16} - V_{E3}$) to the first portion (66) and second shaking data pulses ($V_{17} - V_{E2}$, $V_{17} - V_{E4}$) to the second portion (67), the first and second shaking data pulses having substantially opposite amplitudes.

10 7. An electrophoretic display unit (100) as defined in claim 5, the controller (20) being adapted for controlling the data driving circuitry (30) to provide one or more first reset data pulses to the first portion (66) and one or more second reset data pulses to the second portion (67), the first and second reset data pulses having substantially opposite amplitudes.

15 8. A display device comprising an electrophoretic display unit (100) as defined in claim 1; and comprising a storage medium for storing information to be displayed.

9. A method for driving an electrophoretic display unit (100) comprising an 20 electrophoretic display panel (50,60) which comprises pixels (11), a first counter electrode (16) coupled to pixels (11) in a first portion (66) of the electrophoretic display panel (60), and a second counter electrode (17) coupled to pixels (11) in a second portion (67) of the electrophoretic display panel (60),
the method comprising the steps of supplying a first signal (V_{16}) to the first counter electrode 25 (16) and a second signal (V_{17}), different from the first signal (16), to the second counter electrode (17).

10. A processor program product for driving an electrophoretic display unit (100) comprising pixels (11), a first counter electrode (16) for a first portion (66) of the 30 electrophoretic display panel (60), and a second counter electrode (17) for a second portion (67) of the electrophoretic display panel (60), the processor program product comprising the functions of supplying a first signal (V_{16}) to the first counter electrode (16) and a second signal (V_{17}), different from the first signal (V_{16}), to the second counter electrode (17).

11. A controller for an electrophoretic display unit (100) comprising:

- an electrophoretic display panel (60) comprising pixels (11),
- a first counter electrode (16) coupled to pixels (11) in a first portion (66) of the electrophoretic display panel (60),

5 - a second counter electrode (17) coupled to pixels (11) in a second portion (67) of the electrophoretic display panel (60),
the controller (20) being adapted for controlling a supply of a first signal (V_{16}) to the first counter electrode (16) and a supply of a second signal (V_{17}) different from said first voltage signal (V_{16}), to the second counter electrode (17).